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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,138	04/29/2005	Koji Akiyama	2005_0617A	1736

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EXAMINER	
TSO, WILLIAM	
ART UNIT	**PAPER NUMBER**
2879	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,138	AKIYAMA ET AL.	
	Examiner	Art Unit	
	William Tso	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 April 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *29 April 2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because Figure 8 (a) (b) and (c) are labeled "Pulse voltage for address lectrodes" where "electrodes" is more appropriate. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. **Claims 1-4 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kato et al. (US 6,376, 995 B1)** in view of **Kado et al. (US 6,666,738)** and **Hirano et al. (US 2003/0030377)**.

Regarding **claim 1 and 6,** Kato et al. discloses a plasma display panel including scan and sustain electrodes **(21)** and **(22)** and address electrodes **(23)** (figure 1, column 7 lines 52-54). Kato et al. discloses waveforms for driving the plasma display panel (figure 51, column 27 lines 59-63) where pulse voltages are applied alternately for the scan electrode and sustain electrode, and also a pulse voltage (second pulse voltage) applied to the address electrodes that has rising edge timing synchronizing with rising edge timing of the pulse voltage for the sustain electrode (figure 51). Kato et al. also discloses that the width of the pulses can be changed to adjust the strength of the sustain discharge from the address electrode (column 29 lines 19-21). Kato et al. further discloses that the pulse width of the sustain pulse applied to the third electrode (address electrode) is set arbitrary at any value (claim 18). Therefore, it is readily apparent to one of ordinary skill in the art to have the pulse applied to the address electrode smaller than the pulse applied to the sustain electrode based on Kato et al. disclosure. Kato et al. fails to teach the method of manufacturing the plasma display panel. However, Kado et al. teaches that during a plasma display panel manufacturing process a PDP must be aged in order to stabilize the luminescence and discharge characteristics of the display (column 2 lines 9-15). Furthermore, Hirano et al. teaches that aging of the PDP is done by driving the PDP under practical conditions (paragraph 0008). Therefore, it would have been obvious to one of ordinary skill in the art to use the driving waveforms of Kato et al. which teaches

~~for~~ driving the PDP under practical use to age the PDP in order to stabilize the luminescence and discharge characteristics of the display.

Regarding **claim 2,** Kato et al. discloses the second pulse voltage applied to the address electrode is stopped for a period of time (figure 51).

Regarding **claim 3,** Kato et al. discloses that the second pulse voltage is applied two times (figure 51).

Regarding **claim 4,** Kato et al. discloses that the voltage of the sustain pulses to be applied can be set at any value. Therefore, it is readily apparent to one of ordinary skill in the art to have the value of the pulse voltage the same or less than the pulse voltage applied to the sustain voltage.

3. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kato et al. (US 6,376, 995 B1)** and **Kado et al. (US 6,666,738)** and **Hirano et al. (US 2003/0030377)** in view of **Chung (US 2003/0141815 A1).**

Regarding **claim 5,** Chung teaches "in addition, the panel aging process is for examining condemned panel in the early stage by applying an appropriate voltage to a panel." Chung also shows discharge start voltages decreasing with aging time (figure 7). Therefore, it would be obvious to one of ordinary skill in the art to apply lower discharge voltages during aging to examine the plasma display panel as time increases.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- **Hashimoto et al. (US 2002/0008680 A1)**
- **Iseki (US 6,483,487 B2)**
- **Mizobata (US 2003/0193453 A1)**
- **Kougami et al. (6,633,268 B2)**
- **Mizobata (6,731,275 B2)**
- **Nakamura (US 6,768,479 B2)**
- **Tokunaga et al. (US 2005/0012691 A1)**
- **Kim et al. (US 2006/0082522 A1)**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Tso whose telephone number is 571-272-9221. The examiner can normally be reached on Monday-Friday; 8:30am-6:00pm EST; First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William Tso
Examiner
Art Unit 2879

WT

WT

KARABI GUHARAY
PRIMARY EXAMINER